REMARKS

Favorable reconsideration and allowance of this application are requested.

1. Discussion of Amendments

The allowance of claim 11 is noted appreciatively by the applicants. By way of the amendment instructions above, claim 11 has been recast in independent form to include all the subject matter of original claim 1 from which it originally depended.

Claim 1 has been amended so as to include the substance of original claims 5 and 6. As such, claims 5 and 6 have been cancelled.

The remaining dependent claims have been amended so as to employ transitional language more consistent with US practice (i.e., to replace "characterized in that" with "wherein").

Accordingly, upon entry of the present amendment, claims 1-4 and 7-12 will remain pending herein, of which claims 1 and 11 are in independent format.

2. Response to Substantive Issues

Several publications have been employed to rejection various prior pending claim sunder 35 USC §102(b). Specifically, prior claims 1 and 5 attracted a rejection under 35 USC §102(b) as allegedly being anticipated by Bielefeldt (USP 5,874,291); prior claims 1-4, 7-8 and 10 attracted a rejection under 35 USC §102(b) as allegedly being anticipated by Cohen (USP 5,057,227); prior claims 1-2, 4, 6-8 and 10 attracted a rejection under 35 USC §102(b) as allegedly being anticipated by Blowes et al (USP 4,990,031); and prior claims 1-4 and 7-10 attracted a rejection under 35 USC §102(b) as allegedly being anticipated by Yerushalmi (USP 6,203,703). Cohen has also been applied against prior claims 5-6 and 12 to reject the same as "obvious" and hence

unpatentable under 35 USC §103(a). Applicants suggest that none of the applied references are appropriate against the amended claims presented above.

Applicant notes in this regard that prior proposals for the remediation of contaminated groundwater as discussed in the present specification including pumping the contaminated groundwater above ground and treating it above ground. This technique has certain disadvantages as discussed on page 1, lines 10-31 of the original specification. Another prior technique involves stripping the ground water of volatile compounds by pumping air through the groundwater that then rises through the soil as contaminated air whereupon it reaches an active layer and thereby decontaminated.

The present invention differs from the prior techniques in this art in that groundwater – not the air containing the volatile compounds extracted form the contaminated groundwater – is contacted ***directly*** with thee active layer with the aid of a gas and/or by pumping. Such a distinction is clearly recited in step b) of claim 1 as follows: "***contaminated groundwater*** is contacted ***with the biologically active layer*** with the ***aid of a gas and/or by pumping***." (emphasis added)

Neither Bielefeldt nor Cohen describe contacting of groundwater ***with a biologically active layer with the aid of a gas and/or by pumping***. Specifically, Bielefeldt deals with the use of a newly discovered bacterium in bioremediation, wherein treatment of air-stripping vapors is preferred and wherein the contaminated air is led through a bioreactor with a pure culture of microorganisms (column 7, lines 20-35).

Cohen on the other hand describes how hydrocarbon contaminates may be removed from groundwater by digging a trench perpendicular to the contaminated water or soil and by filling such trench with peat material in order to remove contaminants from the groundwater. There is no mention of active transport of the groundwater to the active layer with the aid of a gas and/or by pumping.

Thus, neither Bielefeldt nor Cohen anticipates any claims pending herein under 35 USC §102(b). Nor does the combination of such patents render the claims "obvious" under 35 USC §103(a).

In this regard, the Examiner argues that it would have been obvious to use a pump to move liquids because this is ubiquitous in the filed. While moving liquids generally with a pump may indeed be ubiquitous, the ordinarily skilled person would not have used such a pump to transport the contaminated groundwater to a bioreactor above ground as taught by Bielefeldt. It would not have been obvious to use a gas or a pump to transport contaminated groundwater to an active layer on or in the soil as claimed in the present invention, simply because the skilled person would not have anticipated that such a layer would have enough capacity for effectively cleaning the groundwater. Instead, the ordinarily skilled person would have tried to make pure preparations of microorganisms in a bioreactor as taught by Bielefedlt.

The rejections based on Blowes et al and Yerushalmi et al are similarly deficient. Specifically, Blowes et al is yet another prior technique wherein a contaminated slurry comprising mine tailings is pumped *above ground* into an impoundment 2. Thus, the Blowes et al technique has all of the disadvantages as mentioned in the subject application on page 1.

Yerushalmi et al disclose the use of a bioreactor for decontamination of underground aqueous plumes. Again, Yerushalmi et al teaches the pumping of groundwater to an *above ground* bioreactor filled with purified microorganisms.

Thus, like Bielefeldt and Cohen, neither Blowes et al nor Yerushalmi et al describe contacting of groundwater with a biologically active layer with the aid of a gas and/or by pumping.

Withdrawal of all rejections advanced in the Official Action dated October 1, 2007 is therefore in order.

3. Fee Authorization

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

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